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ABSTRACT

A study was conducted at Ricks College to determine how well the online public access catalog in the Learning Resources Center (LRC) met the needs of freshmen students. Following a comprehensive literature search, a task force of librarians and selected students participated in the development of a questionnaire, which solicited information on students' characteristics and background, interface between the patron and the computer, and satisfaction with the LRC and its staff. The questionnaires were administered to a sample of 351 students registered in a required humanities course. Study findings included the following: (1) 53% of the respondents were female, 64% were under 21 years of age, and 61% had had a high school grade point average of 3.0 or higher; (2) 63% of the students had no or very little prior experience with computers; (3) 75% had had typing in high school; (4) 61% felt more comfortable with the Ricks College LRC than their high school library; (5) 74% were satisfied with the location of the terminals at the LRC; and (6) factors contributing to the respondents' comfort with the online catalog included the following: having had typing in high school, liking to try new ideas, having a computer at home, frequently using the LRC, and having previous computer experience. Recommendations emerging from the survey focused on orientation workshops for students, one-on-one training for faculty, and minicourses for patrons with no typing skills. The questionnaire is included. (LAL)

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A STUDY TO DETERMINE THE EFFECTIVENESS OF ONLINE CATALOG USE FOR RICKS COLLEGE FRESHMEN AT THE LEARNING RESOURCES CENTER

SOCIETAL FACTORS AFFECTING EDUCATION

by

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Ricks College

A PRACTICUM PRESENTED TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF EDUCATION

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ABSTRACT

The modern library has been greatly affected by automation. But, until recently, only the technical services areas were impacted. Lately however with the advent of the online public catalogcatalog, computer applications have moved directly into the public domain. Since the Ricks College Learning Resources Center (LRC) has such a catalog, the purpose of this practicum was to determine how well the online public access catalog at Ricks College Learning Resources Center (LRC) met the needs of freshman students.

The procedures used to accomplish the purpose of this study included a review of the literature, development of a questionnaire based on discussions with LRC personnel involved in the daily operations of the online catalog, and the use of the IBM System 38 for tabulation of the questionnaire results.

The results of the study showed that the respondents were generally comfortable with the online catalog. Factors such as typing ability and willingness to try new ideas affected how satisfied respondents were with the online system. Whether or not they had a computer at home did not seem to affect satisfaction with the LRC's computer terminals. The findings of this study also generally confirmed earlier studies of user satisfaction such as Mathews and others (1982), which demonstrated that library users preferred the online catalog over the card catalog.

Based on the results of the study, recommendations were

made to involve LRC staff in all future software changes, conduct workshops to provide training for new users, and survey patrons as new software becomes available to ascertain their level of satisfaction.

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INTRODUCTION

For hundreds of years the library and its functions and processes have changed very little. A librarian of the nineteenth century would have found very little of great surprise if he had been transported into a library of the mid-twentieth century. However, in an age of automation, libraries have not escaped the onslaught of computers affecting every phase of library operation from acronyms like COM catalogs (computer output microfiche) to streamlined terminals (access points) to the online catalog, which replaces the card-by-card with a key word search. The introduction into libraries of micro-photography, xerography, and COM catalogs improved and enhanced library efficiency, but they did not disintegrate the basic library concepts of subject classification of materials or of catalog production employing bibliographic description and headings for subject access. Until recently librarians have employed computers mostly to improve efficiency of cataloging, acquisitions, serials control, circulation control, and interlibrary lending, but generally have not made computer power the basis for radical changes in the philosophy and management of information delivery (Kilgour 1984:319). Although originally computers were used primarily in these technical service areas, the last few years automation has begun to make an enormous impact on public service areas of libraries. For example, Wolf (1980:1) notes that "in the past ten years, the complexion of the modern library has been greatly affected by the technology of the computer

age." The impact of this growth has been felt most with the introduction of what is called the online public catalog.

The best dreams and the worst fears of public libraries are coming true. The frontiers of computer technology have advanced, but unlike the successful behind-the-scenes applications to acquisitions and cataloging, the changes occurring now with the online catalog are visible to most library users. Comments McDonald (1983:5):

> Online circulation systems are now commonplace. From the user's viewpoint, their advantages are fairly obvious--reduced waiting time at the checkout desk, an end to the tedious completion of sign-out slips, and instantaneous answers to queries about the location and status of library materials.

Mass storage techniques through the use of magnetic tape and disk are available today that would allow the storage of an entire library's collection of books, full text, in a very small area" (Wolf:1980:2). Such is a "best dream" of present librarians.

The automated catalog usually involves the use of a computer terminal with standard keyboard to allow the patron to query the data base on which all information on holdings for the library are found. Although just a handful of libraries have automated catalogs at this time, it can be supposed as technology now advances that more and more libraries, especially colleges and universities, will soon have catalogs of this type.

As the computer applications move more and more into the public eye, the question of human implications overshadows users and library personnel as a "worst fear." Perhaps, as Erma Bombeck (1973:10) suggests, it is only the older generation that doesn't "trust anything that can't laugh or cry or acknowledge the check

in the mail." According to Gail Lawrence (1983;105), however, some institutions are having a negative experience with the computer:

> After five years of experience with machines, bankers found they were not alone in their fear of machines. The customers of banks have shown a decided hesitancy to substitute pushing the button for talking to a human teller.

Unfortunately, throughout all of this change in the library, the most important and least understood is the effect on the user. The user's approach to solving a problem or filling an information need is, or should be, the very foundation of online catalog design. Hardware can be upgraded, software rewritten, and databases improved, but the user cannot be redesigned to match the needs of the system. Research has shown that most users do not want to take an introductory computer science course before they can begin to look up materials with the online catalog. Computers must conform to and complement user behavior. Failure to respond to this matter could exact a heavy penalty--a major capital investment in a resource that might go unused by the library. Katz (1981:5) shares this concern when she notes this lack of humanness in the interface between man and machine, "especially a loss of privacy."

"Electronic Libraries" are, according to Estabrook (1983:6), having "social and psychological effects on users." The psychological and social effects of libraries adopting online catalogs, public access catalogs are potentially similar to the effect of adoption of computer technologies in other types of organization. The overall effects on the organization are much greater in libraries however. Without basic computer skills, the library patron in the new information society is like a person wandering around a collection

the size of the Library of Congress with all the books arranged at random with no Dewey Decimal system, no card catalog and of course, no friendly librarian to serve his information needs (Naisbitt 1982:33). According to the reference libriarians at the Ricks Learning Resources Center (LRC) who work in the area of the computer terminals (online catalog), patrons are often discouraged from using the online catalog when they had previously been trained at the card catalog. The LRC at Ricks College was determined to address this problem. According to its Mission Statement (LRC 1979:1) the LRC "will seek to serve its patrons in an effective manner." The Mission Statement further states:

> In order to effectively serve LRC patron needs, assessments should be conducted regularly as a part of the LRC's effort in determining and monitoring the extent and intensity of use of LRC facilities for various purposes.

How library automation affected library patrons was a question unanswered. With freshmen coming from primarily small rural high schools it was supposed that there might be some negative effects on how Ricks College freshmen relate to an online catalog. A telephone interview with a local high school English teacher revealed that not only does she fear that her students are intimidated by the new online automated system, but she is also somewhat apprehensive about using the online catalog herself.

How then does the LRC insure that it will be able to continue its efforts to develop positive interpersonal relationships? As suggested above, a needs assessment was conducted to determine whether student's needs were being met by the LRC's new online catalog system. A questionnaire was devised and administered to 350 freshman students

at Ricks College at the conclusion of Spring Semester 1983. A general education humanities class was chosen because, according to the director of institutional research, it represented an excellent cross-section of the freshman student body.

The purpose of this study was to determine if the online catalog in the LRC met the needs of the freshman at Ricks College. This study assumes, and is supported by the literature, that a real human problem exists in the interface between computers and human beings. This is not to suggest that gains in technology are not important, especially in a society that tends to value speed, but rather that access to information is in part a function of the social context in which it is given and received.

The descriptive survey was selected as a method for obtaining data for the study. The questionnaire served as the instrument by which data were collected to identify whether or not the online catalog at the Ricks College LRC met the needs of freshman student.

BACKGROUND AND SIGNIFICANCE

As more and more libraries in higher education utilize computer technology to provide online or public access catalog, the issue of the user interface becomes critical. Online catalogs add an entirely new dimension to catalog use not present or encountered in interactive catalog systems. In terms of process, this new dimension is referred to as human-computer interaction or man-machine communication. In structural terms it is known as the user-system interface or man-machine interface component of the computer system of environment (Hildreth 1982:33). Concern

for societal factor affected by this interface is amplified further by Hildreth (1982:33):

> To understand the uniqueness of online catalogs, it is necessary to achieve a fuller understanding of the promises and problems of human-computer interaction as it is manifested in current state-of-the-art applications. The user-system interface, or simply user interface, is the locus of that interaction undertaken in the use of interactive computer systems, such as online catalogs and other information retrieval systems.

If the concern for the user of the online catalog is prime, then the purposes of the catalog will be designed wholly around his needs. The design of the public catalogs currently being developed should not offer merely improvements in efficiency over earlier catalog designs. Like other great innovations of our time, the online catalog is a far more powerful instrument than previous tools in the library. Kilgour (1984:19) observes that "it will profoundly change the way people go about the business of living, and its purpose must be expressed in societal concepts rather than in narrow bibliographic terms." In this same article he outlined what the major purposes of the online catalog ought to be. It should:

> 1) continously improve availability of information to all people in a community;
> 2) make information available 100 percent of the time, when and where people need it;
> 3) personalize provision of information;
> 4) reduce people's cost, in both time and money; and
> 5) reduce maintenance cost relative to other types of catalogs.

If Kilgour's major purposes are to be achieved the online catalog must also permit swift and accurate retrieval, permit retrieval of information from diverse locations such as dwellings, workplaces and educational institutions, and provide access to local, regional, material and inter-material collections.

Computer terminals have historically been controlled and used solely by library staff, whether or not the general untrained library patron can utilize it successfully remains to be tested. For example, a study by Hoffman and Waters (1982:21) noted that "learning by means of a computer-assisted instructional program would seem to favor those who have the ability to quietly concentrate, are able to pay attention to details, have an affinity for memorizing facts, and can stay with a single task until completion." Others, the study goes on to report, "were likely to drop out of the instructional program." Society's needs are only met well when the online catalog is "user friendly." These needs are met according to Woolls (1983:326), "when all instructions for the program . . . appear on the screen for the user."

It is important to remember, as Saloman (1979:9) notes:

> It is never only a technology that is being introduced. The introduction of a new technology is accompanied by access to new contents, access to newly designed curricula, involvement in new social situations, or in the development of new personal and social techniques. When only a technological change is introduced and everything else is held constant--no great changes can be observed.

The Ricks College LRC, like a few other institutions of higher education, has just recently (1982) experienced the installation of an online catalog in a public service area. Discussion among faculty, students, and administrators as to the merits of the new online system as compared to the card catalog are frequent and varied. As recently as October 1983 the college president questioned whether an online catalog could adequately serve the society known as the Ricks College community. Because of the president's concerns and the LRC's committment to serve its

patrons needs (see Mission Statement), the value of the results of this study should prove worthwhile to the institution.

The current trend of increased use of online catalogs in colleges and universities can have a significant impact on the educational community. The user-oriented view argues for an emphasis on societal need rather than technological concerns. Humanistic concerns that promote the welfare and effectiveness of the people in the community it serves should be paramount. A greater focus needs to be placed on human information characteristics rather than machine processes. The user's response to the online catalog the relationship between man and machine must be carefully monitored (Cochrane 1984:82).

The library of the future has arrived. The dreams of librarians are now realizable and as Wolf (1980:11) concludes:

> The library is no longer a quiet island of refugee in a changing society. Libraries are changing and must change if they are to survive in a system that demands accountability. Further research is needed to determine the views and attitudes of a wide segment of library leaders, public officials, network directors and library users toward the library of the future.

PROCEDURES

The literature indicates that the computer should prove useful to both the library patron and staff alike. This study was concerned with obtaining perceptions of freshman students at Ricks College to determine if the online catalog in the LRC met their needs. The collection of data was accomplished by the use of a questionnaire because, according to Borg (1979:283), it is "considered as a method of systematic data collection." The survey method also

seemed appropriate because the population was large.

The following procedures were utilized in the completion of the practicum:

(1) A comprehensive literature search revealed a tremendous amount of concern for the increased use of computers in libraries, especially online catalogs. Most of the articles made some reference to the "man-machine" interface and the need for these catalogs to meet the needs of society.

(2) A questionnaire (see Appendix A) was developed with the assistance of a special task force of librarians and selected students. A group of librarians and staff who worked daily with the online catalog and the library patron were interviewed to assist in identifying appropriate questions for the survey. The instrument was constructed following a Likert-type scale using the responses "never," "seldom," "usually," "often," and "always." It contained four demographic questions dealing with gender, age, high school GPA, and number of students in high school graduating class. Other sections included background information, computer/patron interface, and residual information.

(3) The questionnaire was administered to a group of students who not only responded to the survey but also checked for content, validity, and ambiguity in the questions. According to Best (1981:179) reliability will be inferred by a second administration of the instrument comparing the responses of both. This second administration was accomplished by having fifteen students respond to the questionnaire. After two weeks the same group responded the second time. The second test was compared to the first and

found to be the same. After reliability had been established the questionnaire was administered to a sample of three hundred and fifty-one students (10% of the freshman class). The students were selected by using "systematic sample" technique as described by Best (1981:11). Students registered for the Humanities 100 Class were chosen for this sample because it was a class required of all freshman, and according to the registrar, this class represented a good cross-section of the freshman at Ricks College. The results were computer analyzed and these findings are discussed in the results section that follows below. Based on the above activities the validity and reliability of the questions on the survey were considered adequate for this study.

(4) The completed surveys were sorted, recorded and scored using the IBM system 38 computer. Only one answer sheet could not be scored.

The limitations of this study include:

(1) The study was confined to Spring Semester 1983, which is typically lower enrollment than Fall Semester.

(2) No allowance was made for students who were enrolled in the Humanities 100 Class, but absent on the day the questionnaire was administered.

(3) Timing of the administration of the survey was inconvenient. The questionnaire was passed out to students on the last regular day of class work. The respondents may have been unwilling to focus on the subject of the survey at that particular time.

The major assumptions of the study were:

(1) Computer technology and its effect on library operations, especially the online catalog, will continue.

(2) Mastery of the skills needed to operate an online catalog will contribute to society's ability to gain access to information over a lifetime.

RESULTS

The data from the questionnaires provided information in four major areas: demographic, computer/background interface, patron information, and residual findings (for complete tabulation of all questions see Appendix B). The demographic data concerned itself with the first four questions on gender, age, high school GPA, and number of students in the respondents high school graduating class. Table 1 summarizes this information. The percentages on the table do not always equal one hundred percent because of rounding of numbers.

Demographic data was reported because it was felt these items could be useful as the results of the survey were analyzed. For example, the responses on age showed that the freshman is a young person and, according to Clark (1984), this has been the case for several previous years at Ricks College, although not true nationally at other community colleges. Results of the high school GPA showed 61% of the respondents had grade points between 3.00-4.00 which seemed a little high at a two year school with an open door policy.

Background data provided by the questionnaire proved valuable because the respondent's previous experiences could have potential

impact on his feelings about the online catalog. Three sub-headings under Background were chosen: general, family, and high school. In the general sections questions 7, 12 and 13 asked freshmen to respond about willingness to try new ideas, previous experience with computers, and comfortableness with computers. These three questions helped establish whether the respondent might be likely to respond well to the online catalog. See Table 2 for a summary.

The family sub-heading, dealt with in questions 6 and 10, sought to establish whether home environment--either order born in the family or a computer at home--might influence use of the online catalog. Table 3 summarizes this data. Finally the third sub-category, high school, was included because skills gained and environmental experiences might prove crucial in the respondents' feelings about computers in the LRC. Typing skill (question 5) and feelings about their high school library (question 8) promised important data in determining how the online catalog at Ricks College met the needs of the freshman students. It was assumed that patrons with some typing skill could perform better and would feel more comfortable a the terminal if negative feelings about their high school libraries might determing whether or not patrons even wanted to use the LRC at all. Table 4 shows this information.

Table 1

Number and Percentage of Respondents
Demographic Data

Demographic Data	No.	%
Gender		
Male	160	47
Female	180	53
No response	2	1
Age		
20 or under	220	64
21 - 25	110	32
26 - 30	8	2
31 - or over	2	1
No response	2	1
High School GPA		
1.99	7	2
2.00 - 2.49	29	8
2.50 - 299	93	27
3.00 - 3.49	115	34
3.50 - 4.00	91	27
No response	7	2
Number in Graduating H.S. Class		
0 - 99	63	18
100 - 199	51	15
200 - 299	72	21
300 - 399	52	15
400 or more	100	29
No response	4	1

Table 2

Number and Percentages of Respondents to General Background Questions

Background	No.	%
Do you like to try new ideas?		
Never	3	1
Seldom	5	1
Sometimes	168	49
Always	156	46
No response	10	3
Previous Experience with Computers		
None	109	32
Very little	107	31
Somewhat	97	28
A great deal	22	6
No response	7	2
How comfortable with Computers		
Comfortable	94	27
Slightly comfortable	124	36
Slightly uncomfortable	64	19
Uncomfortable	49	14
No response	11	3

Table 3

Number and Percentage of Respondents to Family Background Questions

	No.	%
Order born in family		
First	78	23
Second	72	21
Third	74	22
Fourth	43	13
Other	72	21
No response	3	1
Computer at home		
Yes	35	10
No	295	86
No response	12	4

Table 4

Number and Percentage of Respondents to High School Background Question

	No.	%
Typing in High School		
Yes	257	75
No	76	22
No response	9	3
More comfortable with High School Library or Ricks College Library		
High School	122	36
Ricks	207	61
No response	13	4

The third major area covered by the survey, computer/patron interface, dealt with the patrons' levels of satisfaction. Table 5 shows how terminal location expresses satisfaction. It was felt in designing the questionnaire that the respondents might perceive the second and third floors as inconvenient or as having too few terminals. As can be seen in Table 5, there was virtually no difference in how the three floors were rated by the respondents.

Table 5

Percent of Satisfaction by Location of Terminal

Level of Satisfaction	1st Floor %	2nd Floor %	3rd Floor %
Satisfied	74	74	74
Slightly Satisfied	14	15	15
Slightly dissatisfied	5	4	5
Dissatisfied	3	2	3
No response	4	4	3

Table 6 shows which factors might have contributed to the patrons' being satisfied with the computer in the library. As can be seen from the table, all factors except "having a computer at home" and "previous computer experience" scored high. On question 7, "Do you like to try new ideas?" both "sometimes" and "always" were considered acceptable answers to qualify. In question 11, "How often do you use the LRC?" both "daily" and "once a week" were felt to qualify as frequent enough use of the LRC. Also in question 12 "What previous experience have you had with computers?" "somewhat" and "a great deal" were counted in the percentage. However, question 13 "How comfortable are you with computers?" only "comfortable" was acceptable since "slightly comfortable seemed too weak to the LRC staff to be included.

Table 6

Percentage of Factors Which Contribute to Respondents Being Comfortable With the Online Computer

Question	Factors	%
	Typing in High School	77
7	Likes to try new ideas	96
	Computer at home	10
11	How often do you use LRC	95
12	Previous computer experience	48
13	How comfortable with computers	53

Another area covered by the questionnaire dealt with residual findings. These questions treated staff relationships and orientation. Though not germaine to the study they were nevertheless interesting and deserve reporting. Some authors such as Cochrane (1984:82) have pointed out that the interface between librarian and the computer might be as important as the design of the software. Quality of the library staff as perceived by the patron was therefore included in this section. Questions 22, 23 and 24 deal with the ability of patrons to locate LRC staff, the helpfulness and friendliness of that staff, and the respondents' interest in receiving orientation on the online catalog. Table 7 summarizes these results.

Table 7

Residual findings of the Questionnaire

Question		No.	%
22	Able to find staff		
	Often	70	20
	Usually	195	57
	Seldom	47	14
	Never	16	5
	No response	14	4
23	Staff helpful and Friendly		
	Often	130	38
	Usually	170	50
	Seldom	17	5
	Never	2	1
	No response	21	6
24	Interested in orientation		
	Yes	206	60
	No	112	33
	No response	24	7

DISCUSSION, IMPLICATIONS AND RECOMMENDATIONS

This study was designed to determine if the online catalog in the LRC met the needs of the freshman at Ricks College. The data from the study revealed that the online catalog satisfied most of the respondents.

Demographic data showed that the user was quite young. Sixty-four percent were aged twenty or younger This compares well with the typical online user nationally who is a young, well-educated adult (Mathews 1982:101). Knowing the age of the typical freshman at Ricks College should help librarians better meet the needs of these patrons. Mathews (1982:95) notes for example that:

> The majority of non-users are between the ages of 20-24, which is similar to the composition of the user sample. In general, however, non-users are slightly older than users of the online catalog. Non-users have greater senior citizen representation.

Results also showed that sixty-one percent of the respondents had a grade point of between 3.00-4.00 which seemed very high for a two-year open-door school. The relatively high grade point may have contributed to the high level of satisfaction among respondents. As noted earlier by Mathews, typical online users were well educated individuals. Statistics provided by Clark (1984) had shown a high percentage of the students coming from small rural high schools in the past. Using 399 in a graduating class as a cut off point, sixty-nine percent were from small schools, but their level of satisfaction with the computer terminal in the LRC did not seem to be negatively affected by this fact.

Further background results showed that ninety-five percent liked to try new ideas "sometimes" and "always." This high percentage

could have contributed materially to the popularity of the online terminal since this is essentially a new concept in libraries. This thesis is further strengthened when considering the response on "previous experience with computers," sixty-five percent had had "none" or "very little" experience with a computer. As noted on Table 2, only twenty-seven percent claimed to be comfortable with computers.

Family background question indicated that forty-four percent of the freshmen were either first or second child and twenty-two percent were third in the family. Birth-order in the family has been known to affect how well an individual functions in college (Risenmay:1984). In response to whether they had a computer or not at home eighty-six said no. This finding seemed significant since it was thought that having a computer at home would contribute to success at the computer terminal in the LRC. This was not the case.

It was thought that familarity with the keyboard would be a crucial factor in determining satisfaction with the LRC online catalog. This proved to be true. Seventy-five percent of the respondents reported having taken typing in high school. This percentage correlated closely with how satisfied patrons were with online catalog. A marginal measure of satisfaction had to do with which library the respondent was most comfortable with, Ricks or high school. Sixty-one percent favored Ricks and only thirty-six percent recalled being more comfortable with their high school library.

The man-machine interface concern was a major thrust of

the study. This had to do with whether the computer is "user cordial" or "user friendly" primarily through the design of the software. According to Mathews (1982:1070) "user cordiality, like beauty, is in the eyes of the beholder." "A user cordial system," continues Mathews (1982:1070), "will not require the user to formulate derived search keys, such as used in the OCLC system, to retrieve a record."

Although some studies (McDonald 1983, Gail Lawrence 1983, and Katz 1981) concern themselves with the negative aspects of the online catalog. Pease and Gouke (1982:) argue that "the great majority of patrons found at the online catalog expressed a preference for it over the card catalog." These authors contend further that "these findings are supported by actual use patterns. More than half of those who actually tried the online catalog 'switched over' to use it more often than the card catalog." Other evidence of the popularity of the online system was reported by Gary Lawrence (1983:411):

> When contemplating the nature of demand for such growth, it is helpful to remember that about 90 percent of online catalog users like the online catalog, regardless of the size, type, or sophistication of the system they use, and about three-quarters of those users clearly prefer the online catalog to the card catalog. The overwhelming acceptance of the online catalog found in the CLR project is echoed in independent findings from the University of Guelph, where in a local survey of online catalog users, "88 percent indicated that the online search had been successful, and the most serious deficiency in the Guelph online catalog was an insufficient number of terminals."

The results produced some residual findings which might prove useful in future analysis. Questions about quality of service given by the library staff could be important if the patron views the LRC as a whole. Satisfaction with the computer terminal could

be directly affected by how well the library staff interprets the equipment to the patron. Questions 22 and 23 ask if staff are available and are friendly. Respectively the scores are 77% and 88%. This finding compares well with an earlier survey conducted about school services (Clark:1984) in which the LRC rated highly.

Question 24 deals with orientation. Only sixty percent expressed interest in this activity. Perhaps one reason for this apparent lack is that they already think they understand how to use the online catalog and don't need further instruction.

Although pessimism ran high in the early stages of the development of the online catalog, it seems clear from the results of this study that the online catalog will be a permanent fixture in the LRC at Ricks College. Early literature regarding the new "electronic library" raised serious doubts about how well patrons sould be able to relate to the online catalog, described by one as a cold calculating machine. Data from this study and others show that the online catalog in libraries serves the patrons needs most of the time.

As a result of this study the following recommendations are made:

(1) Design changes in current software for the online catalog to take into account the following for the future:

(a) Concern for older non-users who are less likely to be familiar with computer and the attendant software.

(b) Involvement of library staff and patron in the details of design.

(c) Provide approaches to the online catalog equal value to the old card catalog.

(2) Conduct mini-orientation workshops to familiarize freshmen and new patrons with the uses of the online catalog.

(3) Encourage faculty to become familiar with the online catalog through one-on-one training sessions with librarians.

(4) Since new software will be in place spring semester 1985, use the same survey instrument and survey freshman students and other patrons to assess the level of satisfaction with the online catalog.

(5) Develop mini-courses which train patrons without typing skills to gain familarity with the keyboard.

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APPENDIX A

QUESTIONNAIRE

26/27

Dear Student,

About a year ago the Learning Resources Center (library) installed several computer terminals in the building. These terminals have become known as an online catalog. This online catalog replaces the card catalog and is intended to help library users locate materials housed in the LRC.

We in the LRC are anxious to know whether or not this new online catalog meets the needs of our students. Thank you in advance for answering this questionnaire.

1. What is your gender? a. Male_____ b. Female_____

2. What is your age?
   a. 20 or under
   b. 21 - 25
   c. 26 - 30
   d. 31 or over

3. Approximately what was your high school GPA?
   a. less than 1.99
   b. 2.00 - 2.49
   c. 2.50 - 2.99
   d. 3.00 - 3.49
   e. 3.50 - 4.00

4. How many students were there in your high school graduating class?
   a. 0 - 99
   b. 100 - 199
   c. 200 - 299
   d. 300 - 399
   e. 400 - or more

5. Did you take typing in high school?
   a. yes
   b. no

6. In what order were you born in your family?
   a. first
   b. second
   c. third
   d. fourth
   e. other

7. Do you like to try new ideas?
   a. never
   b. seldom
   c. sometimes
   d. always

8. Were you more comfortable using your high school library or using the LRC at Ricks?
   a. high school
   b. Ricks

9. How comfortable are you in using the online computer terminals in the LRC?
   a. comfortable
   b. slightly comfortable
   c. slightly uncomfortable
   d. uncomfortable

10. Do you have a computer at home? (Do not include home video games.)
    a. yes b. no

11. How often do you come into the LRC (library)?
    a. daily
    b. once a week
    c. once a month
    d. once a semester
    e. never

12. What previous experience have you had with computers?
    a. none
    b. very little
    c. somewhat
    d. a great deal

13. How comfortable are you with computers?
    a. comfortable
    b. slightly comfortable
    c. slightly uncomfortable
    d. uncomfortable

Are you satisfied with the location of the terminals in the LRC?

14. First Floor
    a. satisfied
    b. slightly satisfied
    c. slightly dissatisfied
    d. dissatisfied

15. Second Floor
    a. satisfied
    b. slightly satisfied
    c. slightly dissatisfied
    d. dissatisfied

16. Third Floor
    a. satisfied
    b. slightly satisfied
    c. slightly dissatisfied
    d. dissatisfied

17. Are you able to find a terminal when you need one?
    a. never
    b. seldom
    c. usually
    d. often
    e. always

18. Have you attempted to use the online catalog when it was not working?
    a. never
    b. seldom
    c. usually
    d. often

19. If the computer terminal was not working or was busy, did you use the microfiche catalog?
    a. yes b. no

20. How clear are the operating instructions on the computer terminal?
    a. clear
    b. mostly clear
    c. somewhat clear
    d. not clear

21. Is the information from the terminal screen complete enough for your needs?
    a. complete
    b. slightly complete
    c. slightly incomplete
    d. incomplete

22. Are you able to find library staff to help you with the computer?
    a. often
    b. usually
    c. seldom
    d. never

23. If so, are they both helpful and friendly?
    a. often
    b. usually
    c. seldom
    d. never

24. If non credit orientation were available on how to use the online catalog, would you be interested?
    a. yes b. no

APPENDIX B

TABULATIONS OF ALL QUESTIONS ON SURVEY

30/31

LRC SURVEY

1. Gender?	#	%
a. Male	160	47
b. Female	180	53
c. No response	2	1

2. Age?	#	%
a. 20 or under	220	64
b. 21 - 25	110	32
c. 26 - 30	8	2
d. 31 or over	2	1
e. No response	2	1

3. High School GPA?	#	%
a. < 1.99	7	2
b. 2.00 - 2.49	29	8
c. 2.50 - 2.99	93	27
d. 3.00 - 3.49	115	34
e. 3.50 - 400	91	27
f. No response	7	2

4. Number in grad. class?	#	%
a. 0 - 99	63	18
b. 100 - 199	51	15
c. 200 - 299	72	21
d. 300 - 399	52	15
e. 400 or more	100	29
f. No response	4	1

5. Typing in High School?	#	%
a. Yes	257	75
b. No	76	22
c. No response	9	3

6. Order born in family?	#	%
a. First	78	23
b. Second	72	21
c. Third	74	22
d. Fourth	43	13
e. Other	72	21
f. No response	3	1

7. Like to try new ideas?	#	%
a. Never	3	1
b. Seldom	5	1
c. Sometimes	168	49
d. Always	156	46
e. No response	10	3

8. Comfort HS library or L?	#	%
a. High school	122	36
b. Ricks	207	61
c. No response	13	4

9. Comfort online terminal?	#	%
a. Comfortable	136	40
b. Slightly comfortable	95	28
c. Slightly uncomfort	54	16
d. Uncomfortable	45	13
e. No response	12	4

10. Have a computer at home?	#	%
a. Yes	35	10
b. No	295	86
c. No response	12	4

11. How often use LRC?	#	%
a. Daily	194	57
b. Once a week	116	34
c. Once a month	22	6
d. Once a semester	5	1
e. Never	1	0
f. No response	4	1

12. Computer experience?	#	%
a. None	109	32
b. Very little	107	31
c. Somewhat	97	28
d. A great deal	22	6
e. No response	7	2

13. Comfort with computers?	#	%
a. Comfortable	94	27
b. Slightly comfortable	124	36
c. Slightly uncomfort	64	19
d. Uncomfortable	49	14
e. No response	11	3

14. Loc. of terminals	#	%
a. Satisfied	254	74
b. Slightly satisfied	49	14
c. Slightly dissatisf	17	5
d. Dissatisfied	9	3
e. No response	13	4

15. Loc. of terminals on 2nd	#	%
a. Satisfied	254	74
b. Slightly satisfied	51	15
c. Slightly dissatisf	15	4
d. Dissatisfied	8	2
e. No response	14	4

16. Loc. of terminals on 3rd	#	%
a. Satisfied	253	74
b. Slightly satisfied	53	15
c. Slightly dissatisf	16	5
d. Dissatisfied	10	3
e. No response	10	3

17. Find terminal when need	#	%
a. Never	10	3
b. Seldom	29	8
c. Usually	175	51
d. Often	53	15
e. Always	59	17
f. No response	16	5

18. Online cat. not working	#	%
a. Never	160	47
b. Seldom	94	27
c. Usually	42	12
d. Often	31	9
e. No response	15	4

19. Used microfiche instead	#	%
a. Yes	191	56
b. No	134	39
c. No response	17	5

20. How clear instructions?	#	%
a. Clear	87	25
b. Mostly clear	104	30
c. Somewhat clear	80	23
d. Not clear	54	16
e. No response	17	5

21. Terminal infor. complete	#	%
a. Complete	178	52
b. Slightly complete	99	29
c. Slightly incomplete	36	11
d. Incomplete	15	4
e. No response	14	4

22. Find staff help?	#	%
a. Often	70	20
b. Usually	195	57
c. Seldom	47	14
d. Incomplete	15	4
e. No respponse	14	4

23. Helpful and friendly?	#	%
a. Often	130	38
b. Usually	172	50
c. Seldom	17	5
d. Never	2	1
e. No response	21	6

24. Interested in orientati	#	%
a. Yes	206	60
b. No	112	33
c. No response	24	7

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